

ABSTRACT

8824680

D²7 A device for counting and measuring particles provides an analysis of the particle characteristics without the use of light scattering collection principles and includes a processing system 27, comprising control subsystem 13 and an analog-digital subsystem 14, and a light detecting system 11, providing particle direct detection counting and measuring by analysis of the different amplitude detected signals or by analysis of the different light beam intensities, created by obstructions as result of intersection a particle flow along axis 3 with a light beam along axis 2 inside the light detecting system 11 in the area of a light detection means 4, placed on the axis 2.

The light beam intensity analysis is provided by amplitude processing of the detected signals by comparison the reference voltages, determined by appropriate size particles, with the appropriate amplified detected signals, determined by decreased intensity of light beam during particle passage, or by timing processing of the digital pulses of the amplified detected signals, strobing of the detected signals, having different durations as a result of different size particle flowing through the light beam.

00004680-062797